

# STIC Search Report

### STIC Database Tracking Minimum

TO: Scott R Kastler Location: REM 6C03

Art Unit: 1742

**December 12, 2006** 

Case Serial Number: 10/771883

From: Mei Huang Location: EIC 1700

**REMSEN 4B28** 

Phone: 571/272-3952 Mei.huang@uspto.gov

#### Search Notes

Examiner Kastler,

Only three answers were hit and one of them is the current application.

Please feel free to contact me if you have any questions or if you would like to refine the search query,

Thank you for using STIC services!

Mei Huang



Banks, Kendra

209899

From:

SCOTT KASTLER [scott.kastler@uspto.gov]

Sent:

Monday, December 11, 2006 8:07 AM

To:

STIC-EIC1700

Subject:

Database Search Request, Serial Number: 10/771883

Requester:

SCOTT KASTLER (P/1742)

Art Unit:

GROUP ART UNIT 1742

Employee Number:

60485

Office Location:

REM 06C03

Phone Number:

(571) 272 - 1243

Mailbox Number:

6 C 03 REM

Case serial number:

10/771883

Class / Subclass(es):

Earliest Priority Filing Date:

Format preferred for results:

Paper

Search Topic Information:

a search for a platinum alloy containing: 55-63 wt% platinum

2-10 wt% cobalt

27-43 wt% copper

Special Instructions and Other Comments:

SCIENTIFIC REFERENCE BR

Sci Piech Inf - Cnt

DEC 1 1 RECD

Pat. & T.M Office



#### United States Patent and Trademark Office

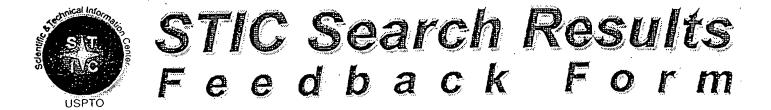
UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Vizgnia 22313-1450 www.uspto.gov



Bib Data Sheet

**CONFIRMATION NO. 3749** 

SERIAL NUMBER 10/771,883	FILING OR 371(c)  DATE  02/04/2004  RULE	<b>CLASS</b> 420	;	GROU	J <b>P ART</b> 1742	UNIT	D	ATTORNEY OCKET NO. COH-15303	
APPLICANTS Peter Tews, Bir	kenfeld, GERMANY;								
** CONTINUING DAT	A **************	*							
** FOREIGN APPLICA	ATIONS **********	***							
IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 05/03/2004									
Foreign Priority claimed		ter COU GER	TE OR INTRY MANY	SHEETS DRAWING 0		TOTAL CLAIMS 39		INDEPENDENT CLAIMS 14	
<b>ADDRESS</b> 040854									
TITLE									
Platinum alloy and method of production thereof									
	ES: Authority has been given in Paper  to charge/credit DEPOSIT ACCOUNT				All Fees				
					1.16 Fees ( Filing )				
RECEIVED No.					☐ 1.17 Fees ( Processing Ext. of time )				
3438 No	for following:					☐ 1.18 Fees ( Issue )			
					Other				
					☐ Credit				



## EC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form
<ul> <li>I am an examiner in Workgroup: Example: 1713</li> <li>Relevant prior art found, search results used as follows:</li> </ul>
☐ 102 rejection
103 rejection
Cited as being of interest.
Helped examiner better understand the invention.
Helped examiner better understand the state of the art in their technology.
Types of relevant prior art found:
Foreign Patent(s)
<ul> <li>Non-Patent Literature         <ul> <li>(journal articles, conference proceedings, new product announcements etc.)</li> </ul> </li> </ul>
> Relevant prior art not found:
<ul> <li>Results verified the lack of relevant prior art (helped determine patentability).</li> </ul>
Results were not useful in determining patentability or understanding the invention.
Comments:

=> fil reg FILE 'REGISTRY' ENTERED AT 09:37:16 ON 12 DEC 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

=> d his

(FILE 'HOME' ENTERED AT 09:12:51 ON 12 DEC 2006)

FILE 'HCAPLUS' ENTERED AT 09:13:13 ON 12 DEC 2006 E US20050169791/PN

L1 1 S E3

FILE 'REGISTRY' ENTERED AT 09:14:25 ON 12 DEC 2006

L2 9 S E1-9 L3 2559 S 50-70 PT/MAC L4 64115 S 1-15 CO/MAC L5 12064 S 25-45 CU/MAC L6 6 S L3 AND L4 AND L5

FILE 'HCAPLUS' ENTERED AT 09:23:23 ON 12 DEC 2006 L7 3 S L6

=> fil hcap

FILE 'HCAPLUS' ENTERED AT 09:37:57 ON 12 DEC 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d 17 ibib abs hitstr hitind 1-3

L7 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:696422 HCAPLUS

DOCUMENT NUMBER:

143:177473

TITLE:

Platinum-copper alloys suitable for jewelry and

ornamental articles

INVENTOR(S):

Tews, Peter Germany

PATENT ASSIGNEE(S): SOURCE:

U.S. Pat. Appl. Publ., 7 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005169791	A1	20050804	US 2004-771883	200402
CA 2555255	AA	20050818	CA 2004-2555255	04

```
200402
                                                                    04
    WO 2005075690
                          A1
                                20050818
                                            WO 2004-EP1020
                                                                    200402
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
             CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
             KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
             MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD,
             SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
             VC, VN, YU, ZA, ZM, ZW
        RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
            AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
            DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
    EP 1711641
                          A1
                                20061018
                                            EP 2004-707913
                                                                    200402
                                                                    04
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
            PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
             SK
                                            US 2004-771883
PRIORITY APPLN. INFO.:
                                                                    200402
                                                                    04
                                            WO 2004-EP1020
                                                                    200402
                                                                    04
```

AB The decorative alloys contain: Pt 55-63. Cu 27-43, and Co 2-10% by weight; or Pt 70-79.5, Cu 10.5-28, and Co 2-10% by weight The alloys optionally contain Pd, Ir, and/or Ru at 0.001-2%, and/or In and/or Ga 0.001-2%. The Pt alloys can be prepared by induction melting of charge mixts., have good mech. formability, and are suitable for manufacture of ornamental articles, watch bands, and jewelry. The typical Pt alloy having decorative white color and the m. range or 1360-1410° contains Pt 58.6, Cu 37.3, and Co 4.1%, and has annealed Vickers microhardness of 170 increased by 60% rolling to 300.

IT 861252-00-8 861252-01-9 861252-02-0

RL: TEM (Technical or engineered material use); USES (Uses)
(alloying of; platinum-copper alloys suitable for white jewelry
and ornamental articles)

RN 861252-00-8 HCAPLUS

NAME)

CN Platinum alloy, base, Pt 55-63, Cu 27-43, Co 2-10 (9CI) (CA INDEX NAME)

```
Component
          Component
                       Component
          Percent
                    Registry Number
55
                        7440-06-4
   Pt
             - 63
   Cu
          27
                        7440-50-8
                43
   Co
           2
                10
                        7440-48-4
    861252-01-9 HCAPLUS
RN
    Platinum alloy, base, Pt 70-80, Cu 10-28, Co 2-10 (9CI)
CN
```

(CA INDEX

```
Component
           Component
                         Component
            Percent
                      Registry Number
70 - 80
                          7440-06-4
           10 - 28
   Cu
                          7440-50-8
   Co
                          7440-48-4
    861252-02-0 HCAPLUS
RN
    Platinum alloy, base, Pt 58-60, Cu 36-39, Co 3.5-4.5 (9CI) (CA INDEX
CN
    NAME)
Component
           Component
                         Component
           Percent
                     Registry Number
=======+==========
   Pt
          58 - 60
                          7440-06-4
   Cu
          36 - 39
                          7440-50-8
           3.5 - 4.5
   Co
                          7440-48-4
TT
    861252-03-1
    RL: TEM (Technical or engineered material use); USES (Uses)
       (for jewelry; platinum-copper alloys suitable for white jewelry
       and ornamental articles)
    861252-03-1 HCAPLUS
RN
    Platinum alloy, base, Pt 59, Cu 37, Co 4.1 (9CI) (CA INDEX NAME)
CN
                        Component
Component
           Component
                     Registry Number
           Percent
Ρt
              59
                          7440-06-4
   Cu
              37
                          7440-50-8
   Co
              4.1
                          7440-48-4
    ICM C22C005-04
IC
INCL 420466000
    56-3 (Nonferrous Metals and Alloys)
CC
    861252-00-8 861252-01-9 861252-02-0
IT
    RL: TEM (Technical or engineered material use); USES (Uses)
       (alloying of; platinum-copper alloys suitable for white jewelry
       and ornamental articles)
IT
    861252-03-1
    RL: TEM (Technical or engineered material use); USES (Uses)
       (for jewelry; platinum-copper alloys suitable for white jewelry
       and ornamental articles)
    ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                       2004:570062 HCAPLUS
DOCUMENT NUMBER:
                       141:127237
TITLE:
                      Pt-based amorphous alloys for melt casting with
                       bulk solidification
INVENTOR(S):
                       Schroers, Jan; Johnson, William L.
PATENT ASSIGNEE(S):
                       Liquidmetal Technologies, Inc., USA
                       PCT Int. Appl., 39 pp.
SOURCE:
                       CODEN: PIXXD2
DOCUMENT TYPE:
                       Patent
                       English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                        APPLICATION NO.
    PATENT NO.
                                                               DATE
                       KIND
                              DATE
                                         ______
                       _ _ _ _
```

```
WO 2004059019
                          A1
                                20040715
                                            WO 2003-US41345
                                                                    200312
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,
             SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,
             ZA, ZM, ZW
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
             AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE,
             DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
             SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
             MR, NE, SN, TD, TG
     AU 2003300388
                          Δ1
                                20040722
                                            AU 2003-300388
                                                                    200312
                                                                    22
                                20060615
    US 2006124209
                          Α1
                                            US 2005-540337
                                                                    200511
                                                                    07
PRIORITY APPLN. INFO.:
                                            US 2002-435408P
                                                                    200212
                                                                    20
                                            WO 2003-US41345
                                                                    200312
```

AB The Pt-based amorphous alloys suitable for melt-quenched articles with bulk solidification typically contain Pt 39-50, Co 0-15, Cu 16-35, Ni 0-15, and P 17-25 atomic%, optionally with minor Si and/or B. The Pt alloys optionally contain added Pd, and minor Cr, Ir, Au, Ge, Ga, Al, Sn, and/or Sb. The Pt-Ni-Co-Cu-P alloys are suitable for melting at <600°, and can be cast with melt quenching to the amorphous thickness of 5-20 mm. The Pt-alloy melt is optionally stabilized with molten B2O3 flux on the surface in cooling, or melted under vacuum followed by pressurizing at 5-150 psi. The Pt44Cu26Ni10P2O alloy shows melting at 600°, glass-transition temperature 255°, critical amorphous casting thickness of <14 mm, and Vickers microhardness of 400.

IT 721966-54-7

RL: TEM (Technical or engineered material use); USES (Uses) (alloying of; Pt-Cu-Ni-P type alloys cast with bulk solidification for amorphous microstructure)

RN 721966-54-7 HCAPLUS

CN Platinum alloy, base, Pt 29-89, Cu 7-33, Co 0-13, Ni 0-13, P 3.6-12 (9CI) (CA INDEX NAME)

Component	Component			Component		
	Percent		nt	Registry Number		
======+	=====	===	====	-+		
Pt	29	-	89	7440-06-4		
Cu	7	-	33	7440-50-8		
Co	0	-	13	7440-48-4		
Ni	0	-	13	7440-02-0		
P	3.6	-	12	7723-14-0		

IC ICM C22C005-04

CC 56-3 (Nonferrous Metals and Alloys)

IT 721966-54-7 721966-55-8

RL: TEM (Technical or engineered material use); USES (Uses) (alloying of; Pt-Cu-Ni-P type alloys cast with bulk solidification for amorphous microstructure)

L7 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:732717 HCAPLUS

DOCUMENT NUMBER: 133:301240

TITLE: Magnetic dental casting alloys

INVENTOR(S): Naruse, Shiqeyasu; Ide, Norihiro; Yamada, Shoji;

Watanabe, Osamu

PATENT ASSIGNEE(S): Tokuriki Honten K. K., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000287999	A2	20001017	JP 1999-101790	
				199904 08
PRIORITY APPLN. INFO.:			JP 1999-101790	199904
				0.8

- AB The posts attached to residual dental roots to attract magnets attached to dentures, comprise Pd-Co- or Pt-Co-based magnetic alloys containing Au, Ag, Cu, Zn, In, and/or Sn. A magnetic alloy containing Pd 48, Co 22, Au 3, Ag 14, Cu 10, Zn 2, and In 1 weight% showed m.p. 1.192°, attractive force 415 g, good castability, and high corrosion resistance.
- IT 301529-73-7

RL: DEV (Device component use); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Pd-Co- or Pt-Co-based magnetic dental casting alloy posts for denture fixation)

RN 301529-73-7 HCAPLUS

CN Cobalt alloy, base, Co 10-100,Pt 0.5-90,Au 0-58,Ag 0-35,Cu 0-30,In 0-5,Sn 0-5,Zn 0-5 (9CI) (CA INDEX NAME)

Component	Per	onent cent	Component Registry Numbe	
ÇO EĐ Au	10 0.5	- 100 - 90 - 58	+ 7440-48-4 7440-06-4 7440-57-5	_
Ag ©	0	- 35 - 30	7440-37-3 7440-22-4 7440-50-8	
In Sn Zn	0 0 0	- 5 - 5 - 5	7440-74-6 7440-31-5 7440-66-6	
IC ICM	A61C01			

ICS A61C008-00; C22C005-04

CC 63-7 (Pharmaceuticals)

=>